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REMARKS

Claim Amendments

Claims 1, 14, 29, 50 and 57 were amended to clearly indicate that the stream containing oxygenates is a hydrocarbon stream. Support for the amendment can be found throughout the specification, for example, in paragraphs [0004], [0008] and [0022]. Claim 14 was also amended to place it in better form.

Claims 2, 15, 26, 33, 38 and 59 were amended to place them in better form.

New claim 64 was added which finds support in claim 2, for example.

Claim 30 was amended to depend from new claim 64.

Claim 58 was amended to indicate that the hydrocarbon stream includes indigenous oxygenates. Support can be found for this amendment, for example, in paragraphs [0023], [0024] and claim 33.

Claim Objections

Claim 2 was objected to as being improperly dependent from claim 1. The amendments to claims 1 and 2 obviate that objection. As amended, claim 2 clearly limits the subject matter of claim 1.

Claim Rejections - 35 USC 112

Claims 2, 13, 26 and 38 were rejected under 35 USC 112, second paragraph, as being indefinite. The amendments to claims 2, 26 and 38 and the cancellation of claim 13 obviate those rejections.

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Claim Rejections - 35 USC 103(a)

Claims 1 - 13 were rejected under 35 USC 103(a) as unpatentable over Duprey (WO 01/07538 A1) in view of Borghard (WO 96/03359 A1). Applicants respectfully request the Examiner to reconsider and withdraw that rejection for the reasons set forth below.

Duprey discloses catalytically dewaxing a Fischer-Tropsch wax using a zeolite catalyst that is prepared by extruding ZSM-12 crystallite with silica binder; treating the extrudates to remove alumina; impregnating the treated extrudate with platinum; calcining and reducing the impregnated extrudate. Duprey does not disclose or suggest a catalyst that is prepared by contacting a Group VIII metal component and a dewaxing component that has been reduced with a hydrocarbon stream containing one or more oxygenates. Duprey also fails to disclose or suggest that the hydrocarbon stream used for the treatment is one produced over a noncobalt Fischer-Tropsch process. Indeed, Duprey clearly states that oxygenated compounds may cause a deactivation of certain catalysts used in the further treatment of a F-T product.

Borghard discloses upgrading F-T products using a low alpha zeolite catalyst. The low alpha value of the catalyst is taught as being achieved by steaming the noble metal containing zeolite. Steaming is described as "... typically utilizes an atmosphere of 100% steam ...". Examples 2 and 5 teach calcining in air followed by steaming. In view of Duprey's specific teaching that oxygenates tend to deactivate certain catalyst in further treatment (e.g., dewaxing) of F-T products, there is no basis for combining Duprey and Borghard. Moreover, even when combined, the combined references fail to disclose or suggest treatment of a reduced catalyst with a hydrocarbon stream containing one or more oxygenates, let alone a stream produced in an F-T process using a noncobalt catalyst.

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Claims 14 - 26, 28, 30 - 63 were rejected under 35 USC 103(a) as unpatentable over Duprey in view of Borghard. Applicants respectfully traverse that rejection. As previously discussed, Duprey teaches dewaxing a F-T wax with a zeolite catalyst that has been calcined and reduced but is not treated thereafter with a hydrocarbon stream containing oxygenates.

Borghard teaches isomerizing a waxy F-T feed using a catalyst that is prepared by steps including calcinating and steaming the catalytic compounds. Neither reference, alone or in combination, discloses or suggests hydrodewaxing an F-T wax using a catalyst that is made by reducing the catalytic components followed by treatment with a hydrocarbon stream containing one or more oxygenates.

Claim 27 was rejected under 35 USC 103(a) as unpatentable over Duprey in view of Borghard and further in view of Ziemer. Applicants respectfully traverse this rejection. Ziemer is cited as teaching hydrodehazing and hydrofinishing, which teaching fails to overcome the basic deficiencies of the primary references; and hence, this rejection necessarily must fail.

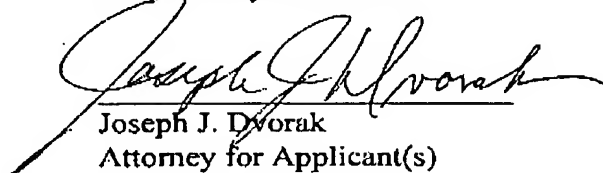
Claim 29 was rejected under 35 USC 103(a) as unpatentable over Duprey in view of Borghard and further in view of Derr. This rejection also is traversed. Derr is cited for teaching use of a non-shifting catalyst. This disclosure, however, fails to overcome the deficiencies of the primary references, and the rejection of claim 29 should be withdrawn.

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In view of the foregoing amendments and comments, applicants respectfully request the Examiner to withdraw the rejections and pass the case to issue.

Respectfully submitted,



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☒ Pursuant to 37 CFR 1.34(a)

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